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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,908	11/07/2000	Osamu Niwa	A33711 PCT U	5718

21003 7590 10-05/2004

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

HON, SOW FUN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,908

Applicant(s)

NIWA ET AL.

Examiner

Sow-Fun Hon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/09/04 has been entered.

Withdrawn Rejections

2. The 35 U.S.C. 103(a) rejections have been withdrawn due to Applicant's amendment dated 8/9/04.

New Rejections

Claim Objections

3. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation of 5 to 30 wt. % of an amorphous polyamide has already been recited in independent claim 1.

Claim Rejections - 35 USC § 112

4. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Table 1 of Applicant's specification (page 11, lines 1-5) only shows a haze % range of from 2.5 % to 6.5 %. Applicant claims a haze % range of from 1.0 % to 7.0 %.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasse et al. (US 5,750,262), as evidenced by Khanna et al. (US 6,040,392).

Gasse teaches a film composed of a polyamide resin layer (A), a polyamide resin layer blend (B) of 10-60 weight % of amorphous polyamide resin, which overlaps the claimed range of 30-5 wt. %, and 40-90 weight % of aliphatic polyamide resin, which overlaps the claimed range of 70-95 wt. %, an adhesive layer (D) (bonding layer) and a seal layer (C) (heat sealing layer) (abstract). A preferred five-layer structure is A/D/B/D/C, wherein D is a polyolefin layer (bonding layer of polyethylene or polypropylene). The total film thickness is 15 to 400 μm (column 2, lines 10-55), which encompasses the claimed range of 15 to 35 μm .

Gasse teaches that the aliphatic polyamide resin can be PA 6 (column 2, lines 10-20), which is synonymous with nylon 6, as evidenced by Khanna.

Khanna uses the terms “nylon polymers” and “polyamides” interchangeably (column 1, lines 20-30).

The recitation “for forming a vapor deposited balloon” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). In the instant case, due to the optional language of intended use, the film can be used for forming other articles.

In any event, Gasse teaches that the film based on polyamide and polyolefins, has good heat sealability (column 1, lines 55-65), and that the two polyamide layers provide elevated mechanical strength, specifically puncture resistance (column 5, lines 45-55). Thus the film is suitable for use as a balloon film due to its puncture resistance, and can be heat-sealed to form a balloon. The polyamide layers provide inherent gas barrier properties, as evidenced by Khanna.

Khanna teaches that polyamide films are used as barrier films (abstract).

Gasse teaches that prior art film prepared from polyamide blends are biaxially stretched on grounds of strength, but can then no longer be thermoformed (column 1, lines 25-30). However, when thermoforming is not used, strength from biaxial stretching does not have to be sacrificed. Thus it would have been obvious to one of ordinary skill in the art at the time the

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invention was made, to have biaxially stretched the film in the absence of the need to use thermoforming to further process the film, in order to strengthen it.

Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). In the instant case, in the absence of a showing of unexpected results, the machines, roll stretching, tenter stretching, or other type of stretching machines, being used as part of the process to produce a biaxially oriented film, are immaterial to the determination of patentability of the biaxially stretched product.

Gasse teaches that nylon 6 (polyamide 6) is distinctly more crystalline (column 1, lines 35-45), which inherently provides some haze % due to the light scattering by the crystals. By default, Gasse teaches that the blend of nylon 6 and amorphous polyamide is distinctly less crystalline (column 1, lines 35-45), and hence has inherently less haze %. Thus the claimed haze % of from 1.0 % to 7.0 % is inherent in the blend.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasse, as evidenced by Khanna, as applied to claims 1-2 above, and further in view of Noguchi (EP 0 792 741).

Gasse, as evidenced by Khanna, has been discussed above. Furthermore, Gasse teaches that the film based on polyamide and polyolefins, has good heat sealability (column 1, lines 55-

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65), and that the two polyamide layers are required to give elevated mechanical strength, specifically puncture resistance (column 5, lines 45-55).

Gasse fails to teach a metal deposited layer formed on the other side, wherein the metal deposited layer is formed on the surface of the outermost polyamide resin layer of the film, and a balloon formed from the film.

Noguchi teaches a multilayer film used for balloons (claim 5) (column 1, lines 10-15), which comprises a metal deposited layer 14 (column 4, lines 1-10) formed on the surface of the outermost polyamide (nylon) base film layer 11 (column 3, lines 50-55). The deposited metal layer provides a surface for images to be printed on (column 1, lines 35-40). Deposition of the metal layer over the whole or partial surface of the film is the result of routine experimentation by one of ordinary skill in the art at the time the invention was made, in order to obtain the printable surface area for the desired images (claim 3). Plastic films have a transparent appearance. Thus the uncovered surface of the film has a transparent appearance (claim 4).

Gasse teaches that the multilayer film has good heat sealability (column 1, lines 55-65), and that the combination of the two polyamide layers gives elevated mechanical strength, specifically puncture resistance (column 5, lines 45-55), which is important for a balloon article.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have sealed the multilayer film of Gasse together, and to have provided the surface of the outermost polyamide resin layer in the multilayer film of Gasse with a metal deposited layer, in order to form a balloon decorated with images, as taught by Noguchi.

Response to Arguments

6. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Hon.

Sow-Fun Hon

09/30/04